

TOUCH SWITCH DEVICE

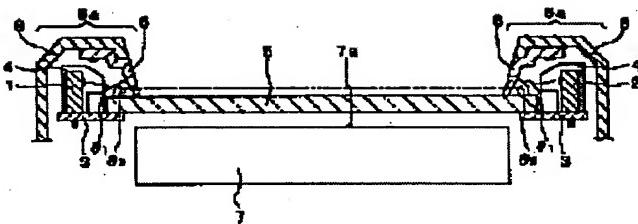
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Abstract of JP11045144

PROBLEM TO BE SOLVED: To prevent touch switch detection from being disabled owing to reflected light from the surface of an infrared-ray transmission filter by forming the infrared-ray transmission filter in a prismatic shape, changing the optical path between a light emitting element and a light receiving element downward, and making the reflected light not incident on the light receiving element.

SOLUTION: This touch switch device passes infrared rays onto the display surface 7a of a display device 7 and cuts off the infrared rays to detect touch switch operation on the display screen 7a. Here, the infrared-ray transmission filter 6 is formed in such a shape that the optical path between a light emitting element at an end part among light emitting elements 1 arranged on the reverse side of the filter part and the light receiving element 2 at the end part arranged on the reverse side of the filter part receiving the light from the light emitting element 1 is changed toward a transparent plate 5, e.g. prismatic shape. Consequently, the light emitted by the light emitting element at the end part is inhibited from being made incident on the light receiving element by being reflected by the surface of the filter part on the light emitting element side.



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